

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,874	04/16/2001	Mark Vange	CIRC014	5573

25235 7590 07/27/2004
HOGAN & HARTSON LLP
ONE TABOR CENTER, SUITE 1500
1200 SEVENTEENTH ST
DENVER, CO 80202

EXAMINER

EL HADY, NABIL M

ART UNIT PAPER NUMBER

2154

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/835,874	Applicant(s) VANGE ET AL.	
	Examiner Nabil M El-Hady	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/26/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-22 are presented for examination.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 10-18, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Colby et al. (6,006,264), hereinafter "Colby".
4. As per claim 1, Colby discloses the invention as claimed including a method for transmitting packets from a computer onto a network, said method comprising the acts: receiving at least two data sets (e.g. col. 3, lines 4-10); determining a priority value for each of the at least two data sets (e.g. col. 2, lines 8-15); composing a composite data set comprising portions of the at least two data sets such that an amount of data from each of the data sets within the composite data set is based upon relative priorities between each of the at least two data sets (e.g. col. 3, lines 4-10); and transmitting the composite data set onto the network (e.g. col. 3, lines 10-15).
5. As per claim 16, the claim is rejected for the same reasons as stated above.

Art Unit: 2154

6. As per claim 2, Colby discloses creating a group comprising a plurality of connection buffers for each data set (e.g. col. 2, lines 61-67); and assigning a priority to each created group (e.g. col. 2, lines 61-67).

7. As per claim 3, Colby discloses monitoring the speed of the connection supplying data to each connection buffer (e.g. cols. 2 and 3, lines 59-67 and 1-10 respectively); and adjusting the size of the corresponding connection buffer to maintain a buffer sized to hold packets received over a preselected time interval (e.g. cols. 2 and 3, lines 59-67 and 1-10 respectively).

8. As per claim 4, Colby discloses the preselected time interval is at least as long as the time required to complete the composing step (e.g. col. 11, lines 44-50).

9. As per claim 5, Colby discloses determining a weight value for each data set (e.g. col. 17, lines 5-15); and selecting portions of the first and second data sets in an order at least partially based upon the weight value (e.g. col. 17, lines 5-15).

10. As per claim 18, the claim is rejected for the same reasons as stated above.

11. As per claim 10, Colby discloses transmitting the prioritized packets to a second networked computer over the Internet (e.g. col. 6, lines 35-40).

12. As per claim 17, the claim is rejected for the same reasons as stated above.

13. As per claim 20, the claim is rejected for the same reasons as stated above.

14. As per claim 11, Colby discloses receiving the prioritized packets from at least one client (e.g. col. 4, lines 60-67).

15. As per claim 12, Colby discloses the prioritized packets are received by an originating server (e.g. col. 5, lines 13-20).

16. As per claim 21, the claim is rejected for the same reasons as stated above.

17. As per claim 13, Colby discloses transmitting the prioritized packets to a second networked computer and receiving prioritized packets from the second networked computer (e.g. col. 5, lines 42-50).

18. As per claim 22, the claim is rejected for the same reasons as stated above.

19. As per claim 14, Colby discloses parsing the data sets (e.g. col. 9, lines 1-5); and determining the priority value at least partially based on the parsed data sets (e.g. col. 9, lines 5-15).

20. As per claim 15, Colby discloses receiving prioritization rules from an external content server associated with at least one of the data sets (e.g. col. 14, lines 41-46); and determining the priority value at least partially based on the prioritization rules (e.g. col. 14, lines 45-52).

Art Unit: 2154

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (6,006,264), hereinafter "Colby" in view of Kawamura (5,630,030), hereinafter "Kawamura".

23. As per claim 6, Colby does not specifically disclose creating a connection buffer for each data set; organizing the connection buffers into logical rings of like priority value; selecting portions of data from each logical ring at a frequency at least partially reflecting the relative priority of the logical rings. Kawamura, on the other hand, discloses creating a connection buffer for each data set (e.g. Figure 1 and col. 2, lines 24-30); organizing the connection buffers into logical rings of like priority value (e.g. col. 1, lines 39-46); selecting portions of data from each logical ring at a frequency at least partially reflecting the relative priority of the logical rings (e.g. col. 1, lines 39-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Colby and Kawamura. The motivation would have been for high priority data to have its own buffer and to be forwarded to the network first.

24. As per claim 19, the claim is rejected for the same reasons as stated above.

25. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (6,006,264), hereinafter "Colby" in view of Kawamura (5,630,030), hereinafter "Kawamura"

as applied to claims 6 and 19 above and further in view of McCormack et al. (6,112,267), hereinafter "McCormack".

26. As per claim 7, Colby and Kawamura do not specifically disclose determining for each logical ring a number of bytes held by all the connection buffers within that ring (nBytes); determining for each ring the number of connection buffers it holds that have data waiting to be sent (nReady); determining a number of bytes to be sent from each logical ring. McCormack, on the other hand, discloses determining for each logical ring a number of bytes held by all the connection buffers within that ring (nBytes) (e.g. col. 6, lines 56-65); determining for each ring the number of connection buffers it holds that have data waiting to be sent (nReady) (e.g. col. 6, lines 56-65); determining a number of bytes to be sent from each logical ring (e.g. col. 6, lines 56-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Colby, Kawamura and McCormack. The motivation would have been for a way to provide the total size of the buffer rings in order to send information from the correct buffer.

26. As per claim 8, the claim is rejected for the same reasons as stated above.

27. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (6,006,264), hereinafter "Colby" and Kawamura (5,630,030), hereinafter "Kawamura" in view of McCormack et al. (6,112,267), hereinafter "McCormack" as applied to claims 7 and 8 above and further in view of Benhase et al. (6,745,262), hereinafter "Benhase".

Art Unit: 2154

28. As per claim 9, Colby, Kawamura and McCormack do not specifically disclose the number of logical rings is "n" defining n discrete priority levels labeled 0 to n-1, and selecting sub-packets from each of the rings in having a selection pattern substantially matching a specific selection round/ logical ring pattern as claimed. Benhase, on the other hand, discloses the number of logical rings is "n" defining n discrete priority levels labeled 0 to n-1, and selecting sub-packets from each of the rings in having a selection pattern substantially matching the claimed selection round/logical ring pattern (e.g. col. 4, lines 35-40). It would have been obvious to one of ordinary skill in the art to combine the teachings of Colby, Kawamura, McCormack and Benhase in order to optimize prioritizing of the buffer rings.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (703) 308-7990. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2154

July 25, 2004

A handwritten signature in black ink, appearing to read "N. El-Hady". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Nabil El-Hady, Ph.D, M.B.A.
Primary Patent Examiner
Art Unit 2154